**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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| Applicants: | R.C. Dezutter et al. | Attorney Docket No.: WEYE121573/25273 |
| Application No.: | 10/674,609 | Art Unit: 1731 / Confirmation No: 4192 |
| Filed: | September 29, 2003 | Examiner: M. Halpern |
| Title: | METHOD FOR CONVEYING, MIXING, AND LEVELING DEWATERED PULP PRIOR TO DRYING | |

**RESPONSE B**

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January 26, 2007

TO THE COMMISSIONER FOR PATENTS:

This paper is filed in response to the Office Action mailed on November 16, 2006. Claims 1-18 are pending in the application. Of these, Claims 15-18 are withdrawn from consideration. Claims 1-14 have been examined and stand rejected. Reconsideration of Claims 1-14 is respectfully requested.

The Rejection of Claims 1-14 Under 35 U.S.C. § 102(E) as Anticipated by or, in the Alternative, Under 35 U.S.C. § 103(a) as Obvious Over Dezutter

The rejection of Claims 1-14 under 35 U.S.C. § 102(e) as being anticipated by Dezutter et al. (U.S. Patent No. 6,811,879) is withdrawn according to page 4 of the Office Action. Therefore, only the rejection of Claims 1-14 under 35 U.S.C. § 103(a) is being addressed.

Claim 1 recites the steps:

> introducing dewatered pulp to a rotating shaftless screw conveyor;
>
> depositing said dewatered pulp from said shaftless screw conveyor to a moving belt conveyor, thereby forming uneven quantities of pulp along a length of belt conveyor;
>
> leveling the uneven quantities of pulp to produce a substantially even quantity of pulp along a length of the belt conveyor; and
>
> feeding a substantially even quantity of pulp per unit time from the belt conveyor to a pulp flaker to reduce the size of pulp into pulp flakes.

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Claim 7 recites the steps:

> conveying and mixing dewatered pulp resulting in an uneven mass flow of pulp; and
>
> leveling the uneven mass flow of pulp to produce a substantially even rate of mass flow of pulp; and
>
> thereafter, depositing the pulp in a substantially even rate of mass flow into a pulp flaker to produce pulp fibers, wherein the pulp flaker has two rotors rotating at a speed differential.

A *prima facie* rejection requires a suggestion or motivation, either in the references or in the knowledge generally available, to modify a reference or to combine references, a reasonable expectation of success, and all the claim limitations must be taught or suggested in the prior art.

In rejecting the claims, the Office Action states that "Dezutter discloses [a] process wherein pulp is blended with adjuvants, flaked and finally dried as shown in Figure 1." Applicants understand this to mean steps 104, 102 (adjuvants, blend), 110 (flake), and 112 (dry) of FIGURE 1.

Claim 1 recites "introducing dewatered pulp to a rotating shaftless screw conveyor." Accordingly, the first flaking unit described by Dezutter is not a rotating shaftless screw conveyor. However, Dezutter teaches that "from the dewatering unit, block 106, the pulp enters a first flaking unit depicted as block 110. The first flaking apparatus breaks up the dewatered pulp bundles into semi-uniform flakes . . . ." (See Col. 5, lines 16-19.) The Examiner, therefore, relies on the Vrbanac et al. patent (U.S. Patent No. 6,769,199), incorporated by reference into the Dezutter patent. The Examiner admits that Vrbanac et al. teaches that from the screw, the pulp then enters a flaker, presumably 56, or the airlock 60.

After introducing dewatered pulp to a rotating shaftless screw conveyor, Claim 1 proceeds by reciting "depositing said dewatered pulp from said shaftless screw conveyor to a moving belt conveyor, thereby forming uneven quantities of pulp along a length of belt conveyor." Dezutter et al. does not teach or suggest a screw conveyor; therefore, it cannot teach

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or suggest this step. The Examiner has admitted that Vrbanac teaches that a flaker follows the screw. Therefore, neither Dezutter nor Vrbanac teaches or suggests at least the step of "depositing said dewatered pulp from said shaftless screw conveyor to a moving belt conveyor, thereby forming uneven quantities of pulp along a length of belt conveyor."

The Examiner's argument to the contrary is not convincing. The Examiner states that "even distribution of pulp onto a belt conveyor is disclosed in Vrbanac in Figure 2."

To the extent that Vrbanac teaches a belt conveyor 110 at all, Vrbanac uses the belt conveyor for separating fines from dried pulp flakes (fibers) after the jet drier 20. (See Col. 9, lines 51-58.) Vrbanac does not teach or suggest depositing the dewatered pulp from the shaftless screw conveyor 44 to a moving belt conveyor. On the contrary, Vrbanac teaches, and the Examiner has admitted, that from the shaftless screw conveyor 44, the dewatered pulp is fed to an airlock 60. Vrbanac describes the airlock 60 as a pulp feed device. (See Col. 8, lines 21-27.) In another embodiment Vrbanac describes a material handling fan 56, which may be a de-flaking device that can be placed before the airlock 60. (See Figure 2.) In any event, Vrbanac never teaches or suggests a belt conveyor after the shaftless screw conveyor 44.

After depositing dewatered pulp to a moving belt conveyor and thereby forming uneven quantities of pulp along a length of belt conveyor, Claim 1 proceeds by reciting "leveling the uneven quantities of pulp to produce a substantially even quantity of pulp along a length of the belt conveyor." Neither Dezutter nor Vrbanac teaches or suggests this step. The vacuum belt conveyor 110 of Vrbanac is a fiber separation station that is provided *after* the pulp exits the jet dryer 20 for separating the pulp fibers from the fines. (See Col. 9, lines 51-63.) The Examiner has not shown how or why Vrbanac teaches or suggests leveling the uneven quantities of dewatered pulp along a length of the belt conveyor.

Claim 1 next proceeds by reciting, "feeding a substantially even quantity of pulp per unit time from the belt conveyor to a pulp flaker to reduce the size of pulp into pulp flakes," while



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Claim 7 recites "depositing the pulp in a substantially even rate of mass flow into a pulp flaker to produce pulp fibers, wherein the pulp flaker has two rotors rotating at a speed differential." Again, the Examiner fails to explain how or why Vrbanac teaches or suggests these claim limitations at all. The belt conveyor 110 is several steps after the flaker, which is presumably either 56 or 60. Because the flaker described by Vrbanac precedes the belt conveyor 110, it is not possible that these claim limitations are even remotely suggested.

Finally, "[t]o support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. & Inter. 1985); M.P.E.P. § 2142, p. 2100-126, rev. 5, Aug. 2006.

The Examiner considers that "Dezutter discloses the invention, or in the least, it would have been obvious to one skilled in the art at the time the invention was made such that the differences are obvious over the cited art." However, this explanation is deficient because since the references do not expressly or impliedly suggest the claimed invention, it was the duty of the Examiner to present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references. A complete lack of any explanation or rationale to explain how the references are modified and why it is obvious to modify them is fatal to a *prima facie* rejection.

For the foregoing reasons, applicants submit that Dezutter, either alone or in combination with Vrbanac, does not teach or suggest either of Claim 1 or 7. Claims 2-6 and 8-14 are dependent from either one of Claim 1 or 7. Accordingly, the withdrawal of the rejection of Claims 1-14 is respectfully requested.



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